



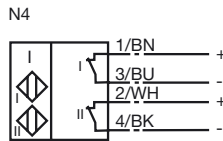
Model Number

NCN3-F25-N4-K

Features

- For installation in housing
- Direct mounting on standard actuators
- Satisfies machinery directive
- EC-Type Examination Certificate TÜV99 ATEX 1479X
- Pluggable cage clamp terminals

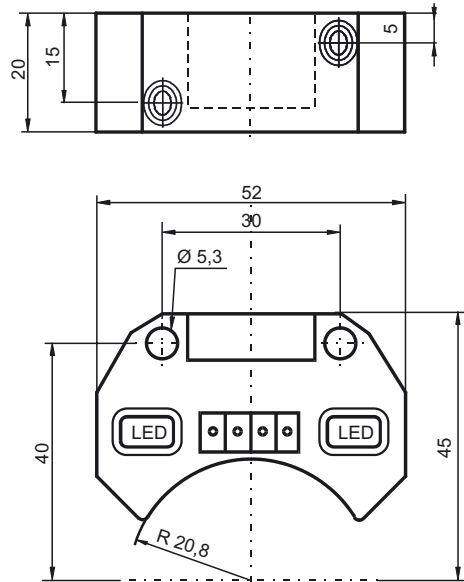
Connection



Accessories

- BT32**
Activator for F25 series
- BT32XS**
Activator for F25 series
- BT32XAS**
Activator for F25 series
- BT33**
Activator for F25 series
- BT34**
Activator for F25 series

Dimensions



Technical Data

General specifications

Switching element function	DC	Dual NC
Rated operating distance	s_n	3 mm
Installation		embeddable mountable
Output polarity		NAMUR
Assured operating distance	s_a	0 ... 2.43 mm
Reduction factor r_{Al}		0.5
Reduction factor r_{Cu}		0.4
Reduction factor r_{303}		1
Reduction factor r_{St37}		1.1

Nominal ratings

Nominal voltage	U_o	8.2 V (R_i approx. 1 k Ω)
Switching frequency	f	0 ... 1500 Hz
Hysteresis	H	typ. 5 %
Reverse polarity protected		reverse polarity protected
Short-circuit protection		yes
Current consumption		
Measuring plate not detected		≥ 3 mA
Measuring plate detected		≤ 1 mA
Indication of the switching state		LED, yellow

Ambient conditions

Ambient temperature	-25 ... 100 °C (-13 ... 212 °F)
Storage temperature	-40 ... 100 °C (-40 ... 212 °F)

Mechanical specifications

Connection type	MINI-COMBICON
Core cross-section (system side)	up to 2.5 mm ²
Housing material	PBT
Sensing face	PBT
Protection degree	IP20
Tightening torque, fastening screws	M5 x 25 : 2.7 Nm
Note	Installation in housing

General information

Use in the hazardous area	see instruction manuals
Category	2G

Compliance with standards and directives

Standard conformity	
NAMUR	EN 60947-5-6:2000 IEC 60947-5-6:1999
Electromagnetic compatibility	NE 21:2007
Standards	EN 60947-5-2:2007 IEC 60947-5-2:2007

Approvals and certificates

UL approval	cULus Listed, General Purpose
CSA approval	cCSAus Listed, General Purpose
CCC approval	Products with a maximum operating voltage of ≤ 36 V do not bear a CCC marking because they do not require approval.

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ATEX 2G

Instruction

Device category 2G

Directive conformity

Standard conformity

CE symbol

Ex-identification

EC-Type Examination Certificate

Appropriate type

Effective internal capacitance C_i Effective internal inductance L_i

General

Highest permissible ambient temperature

Installation, Commissioning

Maintenance

Special conditions

Protection from mechanical danger

Manual electrical apparatus for hazardous areas

for use in hazardous areas with gas, vapour and mist

94/9/EG

EN 60079-0:2006, EN 60079-11:2007

Ignition protection "Intrinsic safety"

Use is restricted to the following stated conditions

 0102 II 2G Ex ia IIC T6

TÜV 99 ATEX 1479 X

NCN3-F25.-N4-K

≤ 100 nF ; a cable length of 10 m is considered. The value is applicable for the sensor circuit.

≤ 100 μH ; a cable length of 10 m is considered. The value is applicable for the sensor circuit.

The apparatus has to be operated according to the appropriate data in the data sheet and in this instruction manual. The EC-Type Examination Certificate has to be observed. The special conditions must be adhered to!

The temperature ranges, according to temperature class, are given in the EC-Type Examination Certificate.

Laws and/or regulations and standards governing the use or intended usage goal must be observed. The intrinsic safety is only assured in connection with an appropriate related apparatus and according to the proof of intrinsic safety.

No changes can be made to apparatus, which are operated in hazardous areas. Repairs to these apparatus are not possible.

When used in the temperature range below -20 °C the sensor should be protected from knocks by the provision of an additional housing.